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Distribution and new records of the River Tyrannulet, *Serpophaga hypoleuca* P.L. Sclater & Salvin, 1866 (Passeriformes, Tyrannidae) in Colombia

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Abstract

Serpophaga hypoleuca P.L. Sclater & Salvin, 1866, is a bird species distributed in northern South America, where it mainly inhabits shrubs on river islands and occasionally large river shores. Its distribution is not well known in Colombia where current records show the species present south of the Amazonas department and locally in Arauca and Vichada. We present a new locality in Colombia along the Guaviare River, in San José del Guaviare, which expands the known distribution of this species in Colombia, filling an information gap for the Guaviare region.

Keywords

Aves, Guaviare River, San José del Guaviare, Tiranuelo Ribereño

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Introduction

Serpophaga hypoleuca P.L. Sclater & Salvin, 1866, is an uncommon flycatcher species that inhabits dispersed successional shrubs, small trees on river sand and mud banks, and occasionally along large banks of rivers and streams of the Arauca, Meta, Orinoco, Apure, and Amazonas rivers (Hilty and Brown 1986; Rojas-R. et al. 1997; Hilty 2003; McNish 2007; Fitzpatrick 2020). In Venezuela, this species is found in seasonally flooded savannahs with thickets, near the Apure, Meta, and Orinoco rivers. It can also be found near few lakes and bushes-gamelot lands along the lower section of the Orinoco River (Meyer de Schauensee and Phelps 1978; Hilty 2003; Lentino et al. 2018; Navarro-Rodríguez et al. 2018). Three subspecies are currently known along its distribution: *S. h. hypoleuca* P.L. Sclater & Salvin, 1866, *S. h. venezuelana* J.T. Zimmer, 1940, and *S. h. pallida* E. Snethlage, 1907. *Serpophaga hypoleuca hypoleuca* is found throughout eastern Ecuador and Peru, southeastern Colombia, western Amazon river in Brazil and northern Bolivia. *Serpophaga hypoleuca venezuelana* is distributed along the Orinoco River and its tributaries in the extreme east of Colombia and central Venezuela. Finally, *Serpophaga hypoleuca pallida* distribution includes the lower sections of the Amazonas, Tapajos and Tocantins rivers

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in central-eastern Brazil (Hilty and Brown 1986; Hilty 2003; van Perlo 2009; Schulenberg 2010; BirdLife 2019; Fitzpatrick 2020; GBIF 2020) (Fig. 1).

In Colombia, *S. h. hypoleuca* has been recorded by several observers since 1974 along the Amazon river's islands and banks in the municipalities of Puerto Nariño and Leticia of the Amazonas department (Hilty and Brown 1986; eBird 2020). Recently, J. Melo (eBird 2020) recorded one individual on rocks and floating wood in the Caquetá River within the boundaries of the Cahuinarí National Park close to Puerto Santander, Amazonas. Although, earlier records of *S. h. venezuelana* are mainly restricted to islands on the Orinoco River in Amazonas state of Venezuela (eBird 2020; Xeno-canto Foundation 2020); however, in Colombia, it was recorded for the first time only in December 1991 inside the oil exploration camp of Caño Limon, Arauca. The record reported one individual which was observed on shrubs and small trees at the margins of an open swamp (Rojas-R. et al. 1997). Since then, there are some scattered records on eBird, which show its distribution along the Meta River close to Puerto Carreño (Vichada), on beaches of the Orinoco River around Cumaribo (Vichada) and along the Tunia River close to La Macarena (Meta) (eBird 2020) (Fig. 1). The latter record, however, still needs to be verified. Here, we report the first record of *S. hypoleuca* along Guaviare River and in Guaviare department. Our goal is to contribute to knowledge of the distribution of this species in Colombia.

Methods

The records presented in this study were made along the Guaviare River in an area known as Buena Vista, in the Guaviare department, eastern Colombia. The observations were made during field trips led by the Asociación Observadores de Aves del Guaviare (GOAG) as part of a project aiming to unveil the bird richness in the Guaviare department. Observations were made using 10 × 42 binoculars and Canon PowerShot SX50 HS digital camera. The species was identified using field guides prepared by Hilty and Brown (1986) and Ayerbe-Quiñones (2018). Vocalization recordings were extracted from videos recorded using the digital camera and are available in Xeno-canto (Xeno-canto Foundation 2020). The distribution map was generated using QGIS v. 3.2.2 (QGIS Development Team 2020) based on polygons available on BirdLife (2019) and records available in eBird (2020), GBIF (2020), and Xeno-canto (Xeno-canto Foundation 2020).

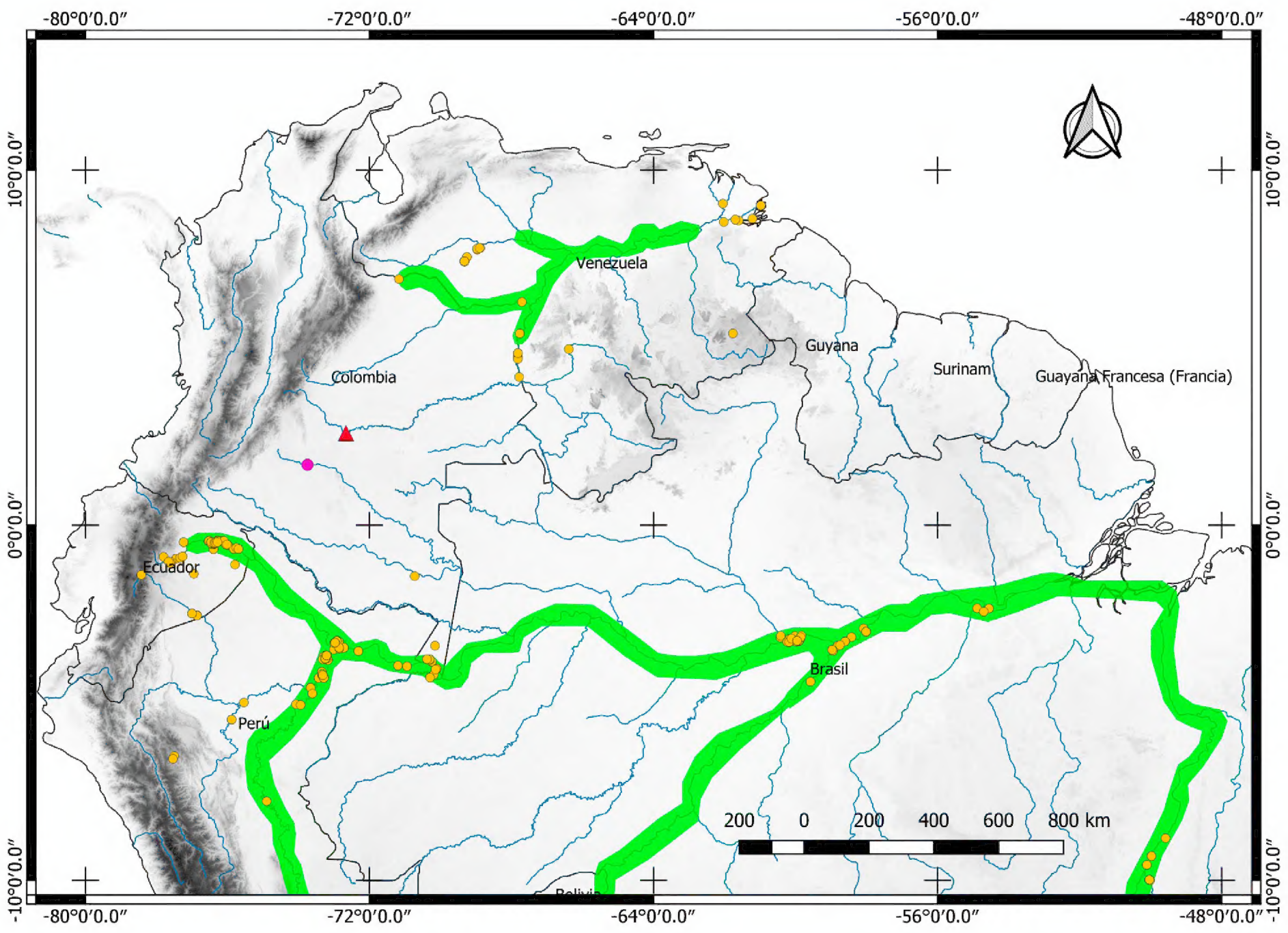

Figure 1. Distribution of *Serpophaga hypoleuca* in northern South America. Green markings reflect distribution of the species published in BirdLife (2019). Yellow dots show records currently available in eBird (2020), GBIF (2020) and Xeno-canto Foundation (2020). Pink dot indicates the position of a potential new record in the Tunia River, La Macarena, Meta which needs further confirmation. The red triangle shows the location of new records presented here, along the Guaviare River, San Jose del Guaviare, Guaviare, Colombia.

Results

New records. COLOMBIA • 1–4 individuals; Guaviare department, San José del Guaviare, Guaviare River, Buena Vista sector; 02°34′N, 072°39′W; 169 m a.s.l.; 08 Mar. 2018, 19 May 2018, 03–29 Jun. 2019, 25 Aug. 2019, 19 Oct. 2019, 17 Nov. 2019, 22 Feb. 2020, 09–23 May 2020; observed and recorded by Wilmer A. Ramírez Riaño and Diana Alexandra Lucena-G. (Fig. 2; Wilmer Andres Ramirez Riaño, XC576897, https://www.xeno-canto.org/576897).

Identification. *Serpophaga hypolecuca* was identified based on plumage which has slightly elongated black crown feathers, grey-brown upperparts, black wings without wingbars, long dark tail, whitish underparts and slightly greyish breast (Hilty and Brown 1986; Fitzpatrick 2020). It is easily confused with Tropical Gnatcatcher, *Polioptila plumbea* (J.F. Gmelin, 1788), which is extremely rare in this region (only one known record of Tropical Gnatcatcher in the area, WARR obs, pers.), but distinguishable by being more gray/ whit than *S. hypoleuca*, besides also having a black tail with white tip (which it keeps mostly raised) (Hilty and Brown 1986; del Hoyo et al. 2020). It may also be confused with the Torrent Tyrannulet, *Serpophaga cinerea* (von Tschudi, 1844); however, this species has never been recorded in the Guaviare river basin due to its occurrence in montane habitats of Andes range (between 1000 and 3000 m a.s.l.) (Hilty and Brown 1986).

Comments. Our first record was on 8 March 2018 in one of the beaches (2–3 m high) of the Guaviare River. This record was subsequently confirmed by trips to the same locality throughout 2019 and 2020 (Fig. 2). During these visits, we recorded its call/song, which is available in Xeno-canto (Wilmer Andres Ramirez Riaño, XC576897, https://www.xeno-canto.org/576897). Most observations consisted of 1–4 individuals foraging on the canopy and midstory of isolated *Tessaria integrifolia* Ruiz & Pav. (Asteraceae) shrubs, 200 m from the main course of the river, and in few cases, some of these individuals were seen foraging on *Actinote* sp. Hübner, 1819 larvae that were feeding on these shrubs. Furthermore, we observed other individuals on 04 Nov. 2019, perched on *T. integrifolia* shrubs along with individuals of *Sporophila castaneiventris* Cabanis, 1849, and *S. bouvronides* (Lesson, 1831) on a beach along the Guaviare River, 1 km upstream (02°35′N, 072°39′W, 180 m a.s.l.) from the previously described locality.

Discussion

These records confirm the presence of *Serpophaga hypoleuca* year around along the beaches of the Guaviare River, and also expand the known distribution of this speciesin Colombia. The previously known records of this species in Colombia are 490 and 700 km south from our records along the Caquetá and Amazon rivers, respectively, 570 km west in Cumaribo, 680 km northwest in Puerto Carreño, and 515 km north in Arauca. To our knowledge, the records reported here in 2018, 2019, and 2020 are the first ones for the Guaviare department and the Guaviare River itself. It is likely that the species is broadly distributed downstream the Guaviare River towards the Orinoco River, as well as in other important rivers in Orinoco and Amazon basins such as the Meta and Caquetá rivers.

Recent expeditions and growth in birdwatching have resulted in a considerably large number of new species records for the Guaviare department (Ramírez et al. 2018a, 2018b). Several recent range expansions of resident species such as *Hylopezus macularius* (Temminck, 1830) (Ramírez et al. 2018a), *Myiopagis flavivertex* (P.L. Sclater, 1887), *Herpsilochmus dugandi* Meyer de Schauensee, 1945 (Ramírez et al. 2018b), *Granatellus pelzelni* P.L. Sclater, 1865 (Ramírez et al. 2019b), as well as migratory species such as, *Calidris alba* (Pallas, 1764), *Leucophaeus atricilla* (Linnaeus, 1758), *Gallinago delicata* (Ord, 1825), *Buteo swainsoni* Bonaparte, 1838, *Tyrannus albogularis* Burmeister, 1856, *Protonotaria*

Figure 2. Photographs of individuals of *Serpophaga hypoleuca* on a beach of the Guaviare River, San Jose del Guaviare, Colombia (29 May 2019 and 25 August 2019). Photos by W.A. Ramírez Riaño.

citrea (Boddaert, 1783), *Geothlypis philadelphia* (A. Wilson, 1810), and *Setophaga castanea* (A. Wilson, 1810) (Ramírez et al. 2019a) emphasize rapid advancement in filling gaps in knowledge about the avifauna of the Guaviare department. Such increase in knowledge has also allowed us to learn previously unknown details about the Colombian avifauna. The records of *S. hypoleuca* in San Jose del Guaviare add to emergent knowledge of this biodiversity rich and poorly studied avifauna in this region (Pinto-Gómez et al. 2014; López et al. 2018; Arredondo et al. 2017; Arredondo-M. et al. 2020). Consequently, we highlight the importance of persistent explorations in this Colombian region as well as in Amazon-Orinoquian transition zones, which will allow us to obtain a better understanding of bird species distributions in Colombia. Such knowledge can prioritize urgently needed conservation actions in the Amazon basin, given the historical transformation and deforestation rates which have increased in the last decade (Clerici et al. 2018, 2020).

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Authors' Contributions

WARR and DAL-G collected the data; SC-H designed and wrote first version of the manuscript; SC-H and JPG prepared final version of the manuscript on which WARR and DAL-G commented; all authors read and approved the final version of this manuscript.

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